



US Department
of Transportation
Federal Aviation
Administration

"Advisory Circular

C398 A 338

Subject: INSTRUCTIONS FOR COMPLETION OF FAA FORM 337 (OMB NO. 2120-0020),
MAJOR REPAIR AND ALTERATION
(AIRFRAME, POWERPLANT, PROPELLER,
OR APPLIANCE)

Date: 5/21/87
Initiated by: AFS-340

AC No: 43.9-1E
Change:

1. **PURPOSE.** This advisory circular (AC) provides instructions for completing Federal Aviation Administration (FAA) Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance).
2. **CANCELLATION.** AC 43.9-1D, Instructions for Completion of FM Form 337 (OMB 04-R0060) Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance), dated 9/5/79, is canceled.
3. **RELATED FEDERAL AVIATION REGULATIONS (FAR) SECTIONS.** FAR Part 43, Sections 43.5, 43.7, 43.9, and Appendix B.
4. **INFORMATION.** FAA Form 337 is furnished free of charge and is available at all FAA Air Carrier (ACDO), General Aviation (GADO), Manufacturing Inspection (MIDO), and Flight Standards (FSDO) district offices, and at all International Field Offices (IFO). The form serves two main purposes; one is to provide aircraft owners and operators with a record of major repairs or alterations indicating details and approval, and the other is to provide the FAA with a copy of the form for inclusion in the aircraft records at the FAA Aircraft Registration Branch, Oklahoma City, Oklahoma.
5. **INSTRUCTIONS FOR COMPLETING FAA FORM 337.** The person who performs or supervises a major repair or major alteration should prepare FM Form 337. The form is executed at least in duplicate and is used to record major repairs and major alterations made to an aircraft, an airframe, powerplant, propeller, appliance, or spare part. The following instructions apply to corresponding items 1 through 8 of the form as illustrated in Appendix 1.
 - a. **Item 1 - Aircraft.** Information to complete the "Make," "Model," and "Serial Number" blocks will be found on the aircraft manufacturer's identification plate. The "Nationality and Registration Mark" is the same as shown on AC Form 8050-3, Certificate of Aircraft Registration.
 - b. **Item 2 - Owner.** Enter the aircraft owner's complete name and address as shown on AC Form 8050-3.

Note: **When a major repair or alteration is made to a spare part or appliance**, items 1 and 2 will be left blank, and the original and duplicate copy of the form will remain with the part until **such time as it is installed on an aircraft. The person installing the part** will then enter the required information in blocks 1 and 2, **give the original of the form to the aircraft owner/operator, and forward the duplicate copy to the local FAA district office within 48 hours** after the work is inspected.

c. Item 3 - For FAA Use Only. Approval may be indicated in Item 3 **when the FAA determines that data to be used in performing a major alteration or a major repair complies** with accepted **industry practices** and all applicable FAR. Approval is indicated in one of the **following** methods. (See paragraph 6b for further details.)

(1) Approval by examination of data only - one aircraft only: **"The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR Part 43, Section 43.7."**

(2) Approval by physical inspection, demonstration, testing, etc., of the data and aircraft - one aircraft only: **"The alteration (or repair) identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR Part 43, Section 43.7."**

(3) Approval by examination of data only - duplication on identical aircraft. **"The alteration identified herein complies with the applicable airworthiness requirements and is approved for duplication on identical aircraft make, model, and altered configuration by the original modifier."**

d. 4 - Unit Identification. The information blocks under item 4 **are** used to identify the airframe, powerplant, propeller, or appliance repaired or altered. It is only necessary to complete the blocks for the unit repaired or altered.

e. Item 5 - Type. Enter a **checkmark** in the appropriate **column** to indicate **if the unit was repaired or altered.**

f. Item 6 - Conformity Statement.

(1) "A" - Agency's Name and Address. Enter name of the mechanic, repair station, or **manufacturer** accomplishing the repair or alteration. Mechanics should enter their name and permanent mailing address. **Manu-**facturers and repair stations should enter the **name and address** under which they do business.

(2) "B" - Kind of Agency. Check the appropriate box to indicate the type of person or organization who performed the **work.**

(3) **"C" - Certificate Number.** Mechanics should enter their mechanic **certificate number** in this block, e.g., **1305888**. Repair stations should enter their air agency certificate **number** and the **rating** or ratings under which the work was **performed**, e.g., **1234, Airframe Class 3. Manufacturer**s should enter their type **production** or Supplemental **Type Certificate (SIC) number**. **Manufacturers of Technical Standard Orders (TSO)** appliances altering these **appliances** should enter the **TSO number** of the appliance altered.

(4) **"D" - Compliance Statement:** This space is used to certify that the **repair or alteration was made in accordance** with the FAR. **When** work was performed or **supervised** by **certificated mechanics not employed by a** manufacturer or repair station, they should enter the **date the repair or alteration was completed** and **sign** their full name. Repair stations are permitted to authorize persons **in their employ to date and sign this** conformity statement.

g. **Item 7 - Approval for Return to Service.** FAR Part 43 establishes the conditions under which **major repairs or alterations to airframes, powerplants, propellers, and/or appliances** may be approved for return to service. This portion of the **form is used to indicate approval or** rejection of the repair or alteration of the unit **involved** and to identify the person or agency making the **airworthiness** inspection. Check the "approved" or "rejected" box to indicate the finding. Additionally, check the appropriate box to indicate **who made the finding**. Use the box labeled "other" to indicate a finding by a person other than those listed. Enter the date the finding was made. **The** authorized person **who** made the finding should sign the form and enter the appropriate certificate or designation number.

h. **Item 8 - Description of Work Accomplished.** A clear, concise, and legible statement describing the work **accomplished should be** entered in item 8 on the reverse side of FAA Form 337. It **is important** that the location of the repair or alteration, **relative to the aircraft or component**, be described. The approved data used as the basis for **approving the major** repair or alteration for return to service **should be identified and** described in this area.

(1) **For example, if a repair was made to a buckled spar, the** description entered in this part **might** begin by **stating, "Removed** wing from aircraft and **removed** skin from outer 6 feet. Repaired buckled spar 49 inches from tip in **accordance** with" and continue **with a** description of the repair. The description should refer to applicable FAR sections and to the FAA-approved **data used to substantiate the airworthiness** of the repair or alteration. **If the repair or alteration is subject to**

being covered by skin or other structure, a statement should be **made** certifying that a **precover** inspection was made and that covered areas were found satisfactory.

(2) Data used as a basis for approving major repairs or alterations for return to service must be FAA-approved prior to its use for that purpose and includes: FAR (e.g., airworthiness directives), AC's (e.g., AC 43.13-1A under certain **circumstances**), TSO's parts manufacturing approval (PMA), FAA-approved **manufacturer's instructions, kits and service handbooks**, type certificate data sheets, and aircraft specifications. Other forms of approved data would be those approved by a designated engineering representative (DER), a manufacturer holding a delegation option authorization (DOA), **STC's**, and, **with certain limitations, previous FAA field approvals**. Supporting data such as stress analyses, test reports, sketches, or **photographs** should be **submitted** with the FAA Form 337. These supporting data will be returned to the applicant by the local **FM** district office since only FAA Form 337 is retained as a part of the aircraft records at **Oklahoma City**.

(3) If additional space is needed to describe the repair or alteration, attach sheets bearing the aircraft nationality and registration mark and the date work was completed.

(4) Showing weight and balance **computations** under this item is not required; however, it may be done. In all cases where weight and balance of the aircraft are affected, the changes should be entered in the aircraft weight and balance records with the date, signature, and reference to the work performed on the FAA Form 337 that required the changes.

6. ADMINISTRATIVE PROCESSING. At least an original and one duplicate copy of the FAA Form 337 will be executed. **FAA** district office processing of the **forms** and their supporting data will depend upon whether previously approved or non-previously approved data was used as follows:

a. Previously Approved Data. The **forms** will be completed as instructed in this AC ensuring that **item 7, "Approval for Return to Service,"** has been properly executed. Give the **original** of the form to the aircraft **owner** or operator, and send the duplicate copy to the local FAA district office within 48 hours after the work is inspected.

b. Non-previously Approved Data. The **forms** will be completed as instructed in this AC, leaving **item 7, "Approval for Return to Service,"** blank. Both copies of the form, with supporting data, will be **sent** to the local FAA district office. When the FAA determines that the major repair or alteration data **complies** with applicable **regulations and is in** conformity with accepted industry practices, data approval will be recorded by entering an appropriate statement in item 3, **"For FAA Use Only."** Both **forms** and supporting data will be returned to the applicant **who** will complete **item 7, "Approval for Return to Service."** The applicant will give the original of the form, with its supporting data, to the aircraft owner **or** operator and return the duplicate copy to the local FAA district office who will, in turn, forward it to the FAA Aircraft Registration Branch, Oklahoma City, Oklahoma, for inclusion in the aircraft records.

c. Signatures on FAA Form 337 have limited purposes:

(1) A **signature** in item 3, "For FAA Use Only," indicates approval of the data described in that section for use in **accomplishing** the work described under **item 8** on the reverse of FAA Form 337.

(2) A signature in item 6, "Conformity **Statement**," is a certification by the person performing the work that it was accomplished in accordance **with** applicable FAR and FAA-approved data. The certification is only applicable to that work described under item 8 on the reverse of FAA Form 337.

Note: Neither of these signatures (subparagraph **c(1)** and **c(2)**) indicate FAA approval of the work described under **item 8** for return to service.

(3) A signature in item 7, "Approval for Return to **Service**," does **not** signify FAA approval unless the box to the left of "FAA **Flight** Standards Inspector" or "FAA Designee" is checked. The other persons listed in item 7, are authorized to "approve for return to service" if the repair or alteration is accomplished using FAA-approved data, is performed in accordance with applicable FAR, and found to conform.

d. FAA Form 337 is not authorized for use on other than U.S.-registered aircraft. If a foreign civil air authority requests the form, as a record of work performed, it **may** be provided. **The** form should be executed in accordance with the FAR and this **AC**. **The** foreign authority should be notified on the form that it is not an official record and that it will not be recorded **by** the FAA Aircraft **Registration** Branch, **Oklahoma** City, Oklahoma.

FAR Part 43, Appendix B, Paragraph (b) authorizes FAA certificated repair stations to use a work order, in lieu of FM **Form 337**, for only major repairs. Such work orders should contain all the information **provided on the form** and in no less detail; that is, the data used as a basis of approval should be identified, a certification that the **work** was accomplished using that data and in accordance with the **FAR**, a description of the work performed (as required in item 8 of the FAA Form **337**), and approval for return to service **must** be indicated by an authorized person. **Signature**, kind of certificate, and certificate **number** must also appear in the record (reference FAR Section 43.9).




William T. Brennan
Acting Director of Flight Standards

5/21/87

AC 43.9-1E
Appendix 1

APPENDIX 1. FAA FORM 337 (FRONT), MAJOR REPAIR AND
ALTERATION (AIRFRAME, POWERPLANT, PROPELLER,
OR APPLIANCE)

 U.S. Department of Transportation Federal Aviation Administration		MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)		Form Approved OMB No. 2120-0020 For FAA Use Only Office Identification	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 801 Federal Aviation Act of 1958).					
1. Aircraft	Make	Cessna	Model	182	
	Serial No.	15-10521	Nationality and Registration Mark	N-3763	
2. Owner	Name (As shown on registration certificate)	Address (As shown on registration certificate)			
	William Taylor	36 Main Street Cambria, Pennsylvania 15946			
3. For FAA Use Only					
The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized by FAR Part 43. <i>Ralph Burlingame</i> AEA-GADO-19 April 5, 1986 <i>Ralph Burlingame</i> District Office Date Signature of FAA Inspector					
4. Unit Identification					
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)			X	
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				
5. Conformity Statement					
A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.	
George Morris High Street Johnstown, Pennsylvania 15236		<input checked="" type="checkbox"/> U.S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Manufacturer		1305888	
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
Date		Signature of Authorized Individual			
March 19, 1987		<i>George Morris</i> George Morris			
7. Approval for Return To Service					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA Flight Standards Inspector	Manufacturer	Inspection Authorization		Other (Specify)
	FAA Designee	Repair Station	Person Approved by Transport Canada Airworthiness Group		
Date of Approval or Rejection		Certificate or Designation No.	Signature of Authorized Individual		
April 9, 1987		237412	<i>Donald Pauley</i> Donald Pauley		

5/21/87

FAA FORM 337 (BACK), MAJOR REPAIR AND ALTERATION
(AIRFRAME, POWERPLANT, PROPELLER, OR APPLIANCE)

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

1. Removed right wing from aircraft and removed skin from outer 6 feet. Repaired buckled spar 49 inches from tip in accordance with attached photographs and figure 1 of drawing dated March 6, 1987.

DATE: March 15, 1987, inspected splice in Item 1 and found it to be in accordance with data indicated. splice is okay to cover. Inspected internal and external wing assembly for hidden damage and condition.

Donald Pauley

Donald Pauley, A&P 237412 1A

2. Rimed interior wing structure and replaced skin P/Ns 63-0085, 63-0086, and 63-00878 with same material. 2024-T3, .025 inches thick. Rivet size and spacing all the same as original and using procedures in Chapter 2, Section 3. of AC 43.13-1A, dated 1972.
3. Replaced stringers as required and installed 6 splices as per attached drawing and photographs.
4. Installed wing, rigged aileron. and operationally checked in accordance with manufacturer's maintenance manual.
5. No change in weight or balance.

END

☐ Additional Sheets Are Attached